Application No.:

10/632,638

Amendment Dated:

June 23, 2004

Attorney Docket No.:

12553/106

AMENDMENTS TO THE CLAIMS

1-18 (Cancelled)

19. (Previously Amended) A method of driving voltage for at least one of two pieces of

piezoelectric element of an actuator and two active parts in each piezoelectric element, the

voltage causes in at least one of said two pieces the two active parts to expand and contract at the

same time, respectively, while the direction of the driving voltages preserves the poling

directions of the corresponding pieces or parts to prevent depoling of the piezoelectric element,

the method comprising:

applying voltages on electrodes of at least one of said two pieces or two parts as two

opposing phase AC signals added to a positive DC bias that has a same direction as a poling

vector of at least one of said pieces or parts, where the bias is larger than or equal to an amplitude

of the AC signal.

20. (Cancelled)

21. (Previously Presented) The method of claim 19, wherein polarization vectors are in the

same direction for said two pieces or two parts.

51379_1 - 3 -

Application No.:

10/632,638

Amendment Dated:

June 23, 2004

Attorney Docket No.:

12553/106

22. (Previously Presented) The method of claim 19, wherein polarization vectors are in the opposite directions for said two pieces or two parts.

- 23. (Previously Presented) The method of claim 22, further comprising applying half the voltages applied to an actuator in which two pieces of piezoelectric element have polarization vectors in the same direction.
- 24. (Previously Presented) The method of claim 19, wherein at least one of said two pieces of piezoelectric elements of said actuator is C shaped.
- 25. (Previously Presented) The method of claim 19, wherein at least one of said two pieces of piezoelectric elements of said actuator is S shaped.
- 26. (Previously Presented) The method of claim 19, further comprising generating synchronous rotation.
- 27. (Previously Presented) The method of claim 19, wherein the actuator has more than two pieces of piezoelectric element.